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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,536

03/31/2004

Ken L. Chang

K35A1498

9993

35219

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09/06/2006

WESTERN DIGITAL TECHNOLOGIES, INC.

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EXAMINER

TUPPER, ROBERT S

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/816,536	Applicant(s) CHANG ET AL.	
	Examiner Robert S. Tupper	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's election without traverse of the invention of Group I, claims 1-11, in the reply filed on 8/18/06 is acknowledged.
2. Claims 12-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/18/06.
3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In all the independent claims, the recitation at the end of the claim "'parallel to the axis of rotation" is indefinite. This confuses the orientation being claimed. It is suggested that this wording be canceled so that the claim refers only to the horizontal plane.
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 4, 6, 7, and 9-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by BUTLER et al (5,953,183).

Note especially figures 5B and 5C. BUTLER et al shows an actuator (20) with a main body section (40), an actuator arm (60), a flex cable guiding support (not numbered), and a flat flex cable (150) in mechanical communication with portions of the support.

The flex cable guiding support is integral with the main body (see column 5 lines 19-20) (re claims 3 and 4).

Concerning claim 6, the flex cable guiding support has horizontal (250) and vertical (200) portions. The recitation "is bent from a position within the horizontal plane" is a method limitation. It is noted that a "product by process" claim is directed to the product per se, no matter how actually made; see *In re Hirao*, 190 USPQ 15 at 17 (footnote 3, CCPA 1976); *In re Brown*, 173 USPQ 685 (CCPA 1972); *In re Luck*, 177 USPQ 523 (CCPA 1973); *In re Fessmann*, 180 USPQ 324 (CCPA 1974); *In re Thorpe*, 227 USPQ 964 (CAFC 1985). The patentability of the Final product in a "product by process" claim must be determined by the product itself and not the actual process and an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Accordingly, the weight given to the "product by process" limitation is the structure "gleaned" from the process.

The flex cable guiding support has first and second extensions (202,204) (re claim 7).

7. Claims 1 and 7-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by BONN et al (5,680,277).

Note especially figures 3, 4B, and 5. BONN et al shows an actuator (not numbered) with a main body section (14), an actuator arm (22 – figure 1A), a flex cable guiding support (50), and a flat flex cable (4) in mechanical communication with portions of the support.

Concerning claims 7 and 8, the flex cable guiding support has first and second extensions (66 and the unnumbered extension between 62 and 3 in figure 4B) that contact opposite sides of the flex cable.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over BUTLER et al (5,953,183) or BONN et al (5,680,277).

Both BUTLER et al and BONN et al show actuators with flex cable guiding supports substantially as claimed.

Both differ in not specifying the actuator arm to be made of a sheet metal material. Note that Applicant's disclosure uses the terminology "actuator body" to mean

the proximal portion of the actuator arm itself that is attached to the center pivot section of the actuator (see element 28 in figures 2 and 3).

The Examiner takes OFFICIAL NOTICE that it is well known and common to utilize sheet metal material for the actuator arms themselves.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize sheet metal material for the actuator arm itself in BUTLER et al or BONN et al. The motivation is as follows: one of ordinary skill in the art would use any known material where none was specified.

Concerning claim 2, the recitation of "stamped" is a method limitation. . It is noted that a "product by process" claim is directed to the product per se, no matter how actually made; see *In re Hirao*, 190 USPQ 15 at 17 (footnote 3, CCPA 1976); *In re Brown*, 173 USPQ 685 (CCPA 1972); *In re Luck*, 177 USPQ 523 (CCPA 1973); *In re Fessmann*, 180 USPQ 324 (CCPA 1974); *In re Thorpe*, 227 USPQ 964 (CAFC 1985). The patentability of the Final product in a "product by process" claim must be determined by the product itself and not the actual process and an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Accordingly, the weight given to the "product by process" limitation is the structure "gleaned" from the process.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

BOECKNER (5,375,021) is another showing of an actuator with a flex cable guiding support that reads on many of the pending claims. It has not be applied to avoid undue multiple rejections. Applicant must define over BOECKNER in responding to this Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S. Tupper whose telephone number is 571-272-7581. The examiner can normally be reached on Mon - Fri, 6:30 AM - 4:00 PM (first Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Robert S Tupper

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Primary Examiner
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